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Vocabulary Builder Reference from...

Markus Fischer: A robot that flies like a bird | TED

Talk

https://www.ted.com/talks/markus_fischer_a_robot_that_flies_like_a_bird

Advanced Words Only

IMPORTANT

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Session 1: Word List

agile

adj. able to move quickly and easily, often in a way that is graceful and controlled

synonym : nimble, quick, flexible

(1) an **agile** mind, (2) **agile** in his movements

The **agile** development process allowed the team to make changes quickly.

rot

v. to decay, or cause something to decay, naturally and gradually

synonym : perish, decay, corrode

(1) begin to **rot**, (2) **rot** with age

Please refrigerate the meat, or it will **rot**.

aerodynamics

n. the study of the motion of air, particularly its interaction with solid objects moving through it, such as aircraft or cars

synonym : aeromechanics, aeronautics, airflow

(1) **aerodynamics** research, (2) **aerodynamics** design

The **aerodynamics** of the car allowed it to glide smoothly through the air.

gull

n. a seabird with long wings, short legs, and usually black and white or grey and white feathers

synonym : seagull

(1) a white sea **gull**, (2) **gull** family

Because **gulls** are gliding birds, their wings are long and slender.

swoop

v. to rapidly or forcefully descend upon something or someone from a great height or distance; to rush or pounce upon

synonym : dart, pounce

(1) **swoop** down the water slide, (2) **swoop** up the escalator

The eagle **swooped** down from the sky to catch its prey.

glider

n. a light aircraft or small, unpowered plane that is designed to glide and soar through the air using natural winds and or thermal currents

synonym : sailplane, soaring bird

(1) **glider** club, (2) paper- **glider**

The hang- **glider** enthusiast looked at the clear skies, anticipating a perfect day to take flight.

pneumatic

adj. relating to or using air or gas under pressure, particularly in machinery or devices; operated by compressed air or gas

synonym : air-powered, gas-pressure, compressed-air

(1) **pneumatic** tire, (2) **pneumatic** cylinder

The mechanic used a **pneumatic** drill to repair the engine.

wingspan

n. the distance between the tips of a bird's wings when fully extended and in flight; often used to describe the size or scope of something, particularly about physical objects or structures

synonym : reach, spread, extent

(1) bird **wingspan**, (2) airplane **wingspan**

The bald eagle has an impressive **wingspan** of over 7 feet.

propulsion

n. the act or process of propelling or driving something forward, often using a motor, engine, or other

mechanical means

synonym: propelling, driving, actuation

(1) **propulsion** technology, (2) nuclear **propulsion**

The spacecraft's **propulsion** system helped it travel through space.

torsion

n. a twisting force that can deform or damage a structure or material, typically produced by a rotational motion

synonym: twisting, torsion, torque

(1) **torsion** stress, (2) **torsion** angle

The **torsion** on the suspension bridge caused it to sway in the wind.

takeoff

n. a departure, especially of airplanes; the initial ascent of an airplane as it becomes airborne

synonym: leaving, departure, liftoff

(1) vertical **takeoff**, (2) **takeoff** run

Our aircraft is now ready for **takeoff**.

Session 2: Spelling

1. pro_____on technology *n.* the act or process of propelling or driving something forward, often using a motor, engine, or other mechanical means

2. sw__p down the water slide *v.* to rapidly or forcefully descend upon something or someone from a great height or distance; to rush or pounce upon

3. bird wi_____an *n.* the distance between the tips of a bird's wings when fully extended and in flight; often used to describe the size or scope of something, particularly about physical objects or structures

4. begin to r_t *v.* to decay, or cause something to decay, naturally and gradually

5. g__l family *n.* a seabird with long wings, short legs, and usually black and white or grey and white feathers

6. nuclear pro_____on *n.* the act or process of propelling or driving something forward, often using a motor, engine, or other mechanical means

7. to_____n stress *n.* a twisting force that can deform or damage a structure or material, typically produced by a rotational motion

8. gl____r club *n.* a light aircraft or small, unpowered plane that is designed to glide and soar through the air using natural winds and or thermal currents

ANSWERS: 1. propulsion, 2. swoop, 3. wingspan, 4. rot, 5. gull, 6. propulsion, 7. torsion, 8. glider

9. a white sea g__l *n.* a seabird with long wings, short legs, and usually black and white or grey and white feathers
10. aer____ics research *n.* the study of the motion of air, particularly its interaction with solid objects moving through it, such as aircraft or cars
11. r_t with age *v.* to decay, or cause something to decay, naturally and gradually
12. ag__e in his movements *adj.* able to move quickly and easily, often in a way that is graceful and controlled
13. ta____f run *n.* a departure, especially of airplanes; the initial ascent of an airplane as it becomes airborne
14. aer____ics design *n.* the study of the motion of air, particularly its interaction with solid objects moving through it, such as aircraft or cars
15. vertical ta____f *n.* a departure, especially of airplanes; the initial ascent of an airplane as it becomes airborne
16. pn____ic cylinder *adj.* relating to or using air or gas under pressure, particularly in machinery or devices; operated by compressed air or gas
17. an ag__e mind *adj.* able to move quickly and easily, often in a way that is graceful and controlled
18. pn____ic tire *adj.* relating to or using air or gas under pressure, particularly in machinery or devices; operated by compressed air or gas

ANSWERS: 9. gull, 10. aerodynamics, 11. rot, 12. agile, 13. takeoff, 14. aerodynamics, 15. takeoff, 16. pneumatic, 17. agile, 18. pneumatic

19. to_____n angle *n.* a twisting force that can deform or damage a structure or material, typically produced by a rotational motion
20. airplane wi_____an *n.* the distance between the tips of a bird's wings when fully extended and in flight; often used to describe the size or scope of something, particularly about physical objects or structures
21. paper-gl____r *n.* a light aircraft or small, unpowered plane that is designed to glide and soar through the air using natural winds and or thermal currents
22. sw__p up the escalator *v.* to rapidly or forcefully descend upon something or someone from a great height or distance; to rush or pounce upon

ANSWERS: 19. torsion, 20. wingspan, 21. glider, 22. swoop

Session 3: Fill in the Blanks

1. Please refrigerate the meat, or it will _____.
v. to decay, or cause something to decay, naturally and gradually
2. Because _____ are gliding birds, their wings are long and slender.
n. a seabird with long wings, short legs, and usually black and white or grey and white feathers
3. The mechanic used a _____ drill to repair the engine.
adj. relating to or using air or gas under pressure, particularly in machinery or devices; operated by compressed air or gas
4. The _____ development process allowed the team to make changes quickly.
adj. able to move quickly and easily, often in a way that is graceful and controlled
5. The eagle _____ down from the sky to catch its prey.
v. to rapidly or forcefully descend upon something or someone from a great height or distance; to rush or pounce upon
6. Our aircraft is now ready for _____.
n. a departure, especially of airplanes; the initial ascent of an airplane as it becomes airborne
7. The hang-_____ enthusiast looked at the clear skies, anticipating a perfect day to take flight.
n. a light aircraft or small, unpowered plane that is designed to glide and soar through the air using natural winds and or thermal currents

ANSWERS: 1. rot, 2. gulls, 3. pneumatic, 4. agile, 5. swooped, 6. takeoff, 7. glider

8. The _____ on the suspension bridge caused it to sway in the wind.
- n.* a twisting force that can deform or damage a structure or material, typically produced by a rotational motion
9. The _____ of the car allowed it to glide smoothly through the air.
- n.* the study of the motion of air, particularly its interaction with solid objects moving through it, such as aircraft or cars
10. The spacecraft's _____ system helped it travel through space.
- n.* the act or process of propelling or driving something forward, often using a motor, engine, or other mechanical means
11. The bald eagle has an impressive _____ of over 7 feet.
- n.* the distance between the tips of a bird's wings when fully extended and in flight; often used to describe the size or scope of something, particularly about physical objects or structures

ANSWERS: 8. torsion, 9. aerodynamics, 10. propulsion, 11. wingspan